UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

TIMEBASE PTY LTD.,	,	
	Plaintiff,	Civil No. 07-1687 (JNE/JJG)
vs.		
THE THOMSON CORNWEST PUBLISHING Cand WEST SERVICES,	CORPORATION,	
D	efendants.	
DEFENDAN	TS' OPENING CI	LAIM CONSTRUCTION BRIEF

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I. <u>INTRODUCTION</u>

This case involves two patents that relate to computer-implemented methods and systems for publishing text-based information, particularly legislation and other legal materials. The plaintiff is TimeBase Pty Ltd. ("TimeBase"), a company that offers legal publishing services in Australia. The defendants are three Thomson and West publishing companies (collectively, "West") that furnish the Westlaw legal publishing system.

TimeBase accuses four products offered through Westlaw—Graphical Statutes,
PastStat Locator, RegulationsPlus, and Graphical Bills—of infringing U.S. Patent Nos.
6,233,592 ('592 patent) and 7,293,228 ('228 patent). Both of these patents relate to the same invention and collectively have 10 independent and 99 dependent claims.

TimeBase has asserted all 109 claims against all four products—436 claims of infringement. Each of the 10 independent claims requires at least three components:
(i) storing portions and modified portions of legislation or other materials; (ii) linking these portions to one another; and (iii) using a concept the patents call a "multidimensional space" (described in detail below) to organize these portions so that they can be sequentially navigated, browsed, and retrieved by an end user. Defendants deny that they have these and other claimed features of the patents and dispute the validity of the patents.

¹ TimeBase also accuses "StatutesPlus," but StatutesPlus is not a product; it is a series of enhancements to the user interfaces of various products within Westlaw. Screen shots of the four accused products are attached as exhibits. (*See* Declaration of Katherine S. Razavi ("Razavi"), Ex. A.)

The parties seek the Court's assistance in construing 11 terms from the 109 asserted claims: Multidimensional Space, Linking Means, Link, Each, Attributes, Displaying, Graphical Representation, Portion, Dividing, Predefined, and Predefined Portion.

II. THE PATENTS-IN-SUIT

A. Background

The '592 patent originally issued on May 15, 2001, and reissued on May 5, 2009 after an *ex parte* reexamination. The reissued patent contains 6 independent and 55 dependent claims covering both systems and methods. The '592 patent claims priority to an Australian patent application filed January 31, 1997, which has lapsed. (Razavi, Ex. B.) TimeBase's attempts to patent the invention in Europe have been unsuccessful. (*E.g.*, Razavi, Ex. C, at 10.)

The '228 patent issued on November 6, 2007, and stems from an application filed on October 12, 2000. Because of the overlap between the subject matter of the '228 application and the '592 patent, the U.S. Patent and Trademark Office ("PTO") initially rejected the '228 patent's claims as anticipated and obvious in light of the '592 patent, along with other prior art. (Razavi, Ex. D.) On August 2, 2006, about six years after the filing date, TimeBase drafted new claims and, for the first time, claimed priority to the '592 patent. TimeBase contends that the '592 and '228 patents relate to the same invention conceived and reduced to practice by the same inventors. (Razavi, Ex. E.)

During prosecution of the '228 patent, TimeBase incorporated all of the '592 patent's specification into the '228 patent. As a consequence, the '592 specification is a

subset of the '228 specification. Therefore, whenever this brief cites the '592 patent specification, it should be understood that the corresponding part of the '228 patent specification is implicitly being cited as well.

B. Subject Matter

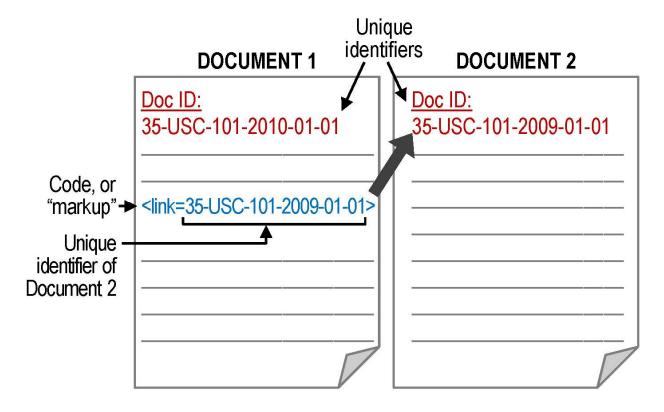
As stated above, all 10 independent claims share the same three minimum requirements: (i) storing portions and modified portions of text-based data (e.g., storing multiple versions of legislation); (ii) linking these portions of text to one another by inserting special codes (markup) into the electronic text; and (iii) using a concept the patents call a "multidimensional space" to organize these portions of text for sequential navigation, browsing, and retrieval by the end user. Each of these requirements is discussed below.

1. Storing Multiple Versions of Text

TimeBase has argued that storing portions and modified portions of text (the "versioning" feature) was inventive. Both the PTO and the European Patent Office ("EPO") have rejected this argument. (*E.g.*, Razavi, Ex. F, at 4 ("electronically publishing multiple versions of text-based data is not a novel feature").) Long before TimeBase filed its first patent application, West published multiple versions of statutory texts. In the mid-1980s, West added statutes from all U.S. jurisdictions to Westlaw, making these statutes available on-line. Ever since that time, Westlaw has stored not only the current but also historical and future versions of U.S. statutes. Therefore, storing multiple versions of text is not new.

2. Linking

The patents claim a means for linking together two portions of text by placing a code (or "markup" language) in the text of one document that contains the unique identifier of a second document. ('592 patent, 97:24–26.) This type of link—called a "static" link—was well known before TimeBase applied for its patents, and is not used by West. An illustration of the static link claimed by the patents is shown below:



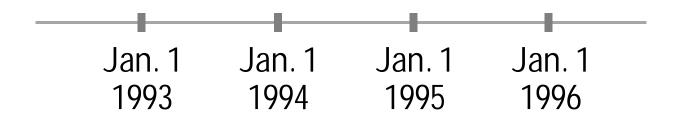
3. Multidimensional Space

The term "multidimensional space" has been used for many years in connection with computer databases that rely on attributes (*e.g.*, characteristics or descriptors) for searching and retrieving stored data. While this concept is not new, TimeBase has argued that the particular multidimensional space claimed in its patents is inventive. TimeBase's

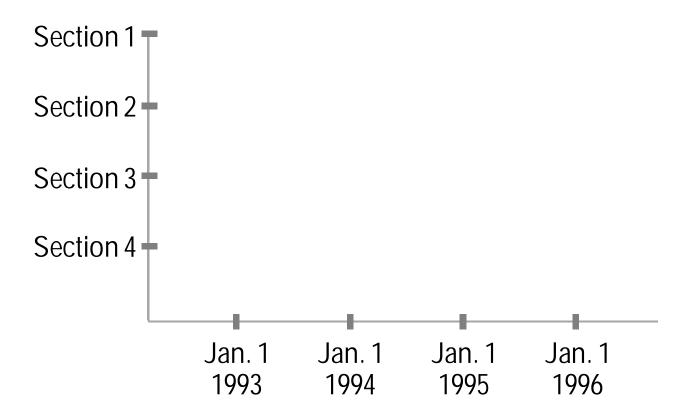
multidimensional space involves placing portions of text within a space that has more than three dimensions and then allowing point-to-point navigation between these portions of text.

The patents state that the claimed multidimensional space can be "represented by a layered grid" ('592 patent, 7:57) as shown in the figures of the patents (Razavi, Ex. H, at 15 ("The multidimensional space may be visualized much like the exemplary space shown in Figures 1-4 of the '592 patent.")). Although the claimed multidimensional space has more than three dimensions, or axes ('592 patent, 7:53–54), for convenience the patents illustrate it using a three-dimensional cube ('592 patent, Figs. 1–4). For the Court's benefit, West reconstructs an exemplary three-dimensional space to show how it works in this context.

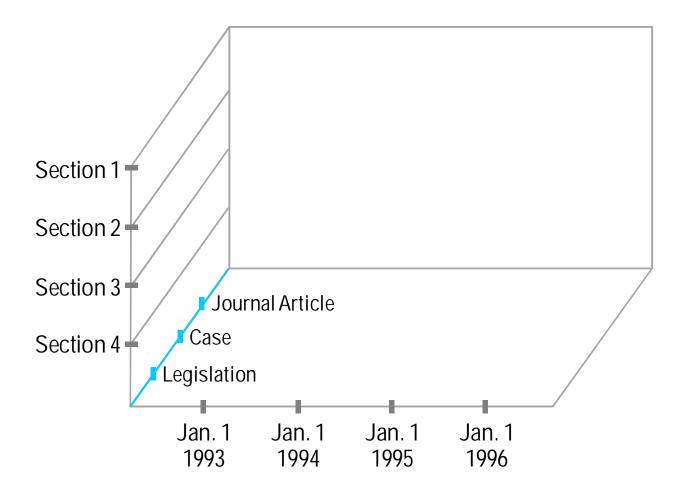
Each portion of text must have multiple attributes associated with it, with each attribute represented by a one-dimensional line. For example, the attribute of time is shown below as a single axis (e.g., the x-axis) with particular attribute values (e.g., dates) appearing as points along the axis:



Similarly, two attributes, such as time and location (*e.g.*, section number within a statute), can be shown by two dimensions. In this model, the x- and y-axes shown below depict possible values for time and location:



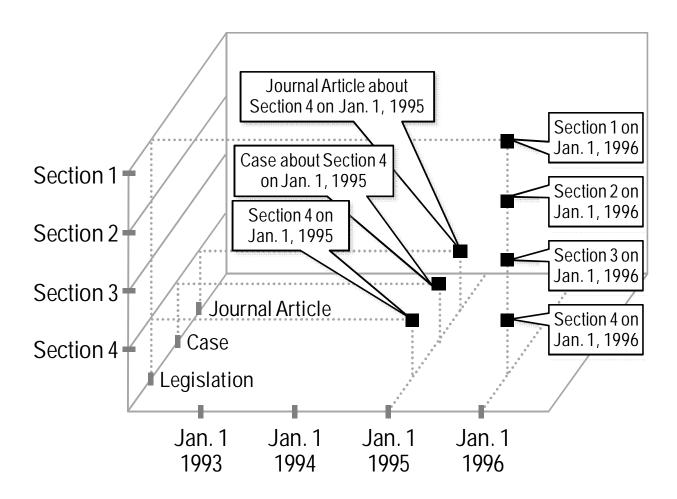
Another attribute, such as type of document (*e.g.*, legislation, case, or journal article), can be added as a third dimension. This three-dimensional space is illustrated below, where time, location, and type are represented by the x-, y-, and z-axes:



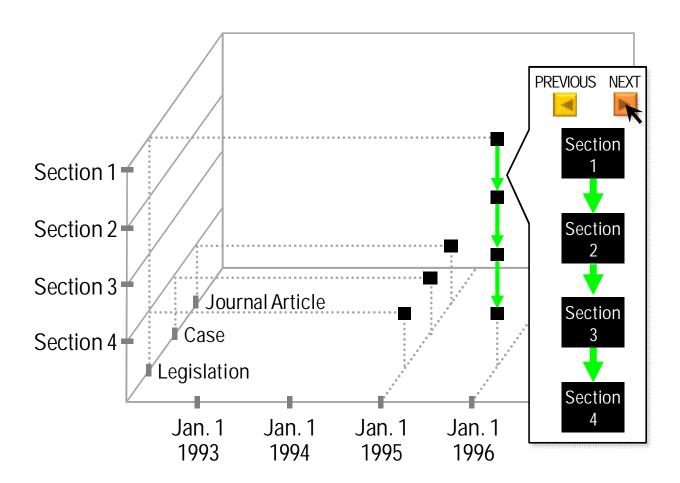
After the axes (dimensions) are defined, then each portion of text is placed into the multidimensional space, using its particular attribute values (in this example, the date, statutory section, and type of document) as coordinates within the space. ('592 patent, 7:49–51 ("This makes it possible to locate each piece or block of text at a particular point

in a 'multidimensional space' using as coordinates the attributes added to the piece or block of text.").)

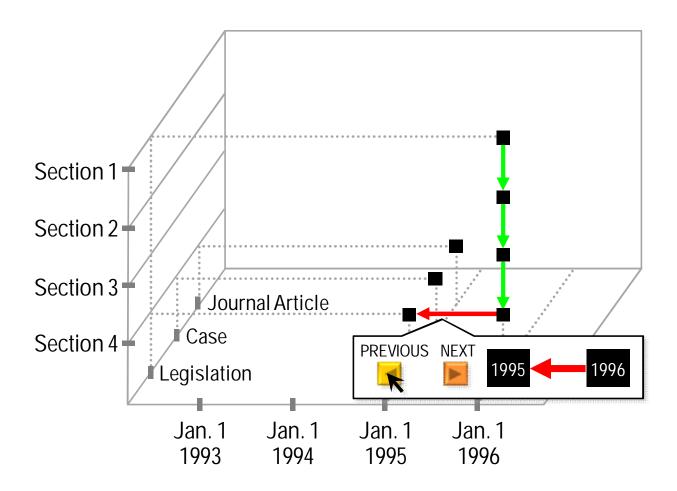
The following figure illustrates seven portions of text, each mapped onto the threedimensional space using as coordinates the particular attributes for that portion:



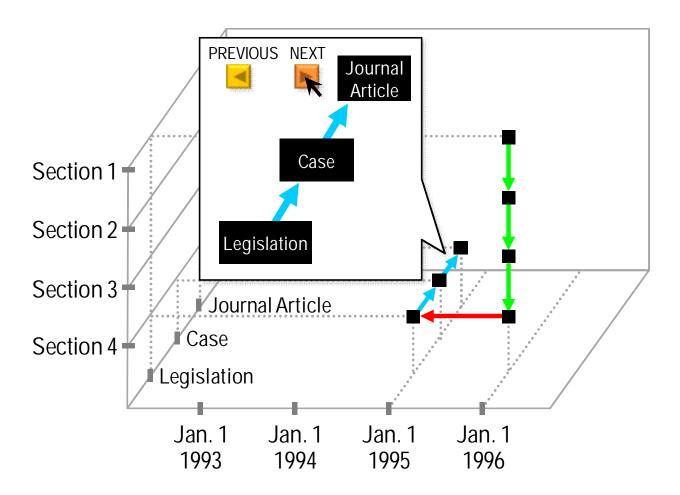
Once the space has been populated with portions of text, then it is possible for a user to move along any axis from one portion of text to any adjacent portion of text. For example, if one wanted to view a series of statutory sections in effect on January 1, 1996, one could begin at the intersection of "January 1, 1996" (time dimension), "Section 1" (location dimension), and "Legislation" (type dimension), and then move down the location dimension from one section to another—all effective on January 1, 1996 (time dimension) and all considered a type of "Legislation" (type dimension)—each time with a single click, as shown below:



Similarly, if one wanted to view a version of a statutory section as it existed on an earlier date, one could click and move along the time dimension from the version of Section 4 in effect on January 1, 1996 to the version of Section 4 in effect on January 1, 1995.



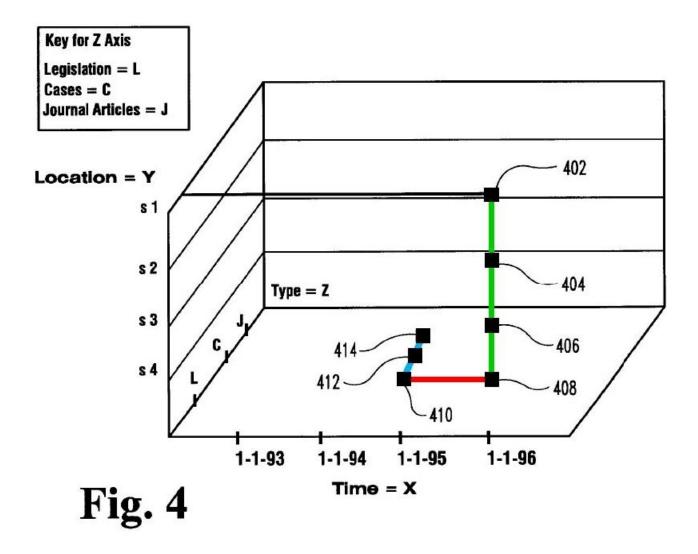
Finally, if one wanted to see how a particular statutory section in effect on a specific date was discussed in a case and then in a journal article, one could hold the date and section number constant and navigate along the type dimension, moving from the statute, to a relevant case, and then to a relevant journal article. This is shown below:



The illustrations used above are similar to those used in the patents to depict the claimed multidimensional space. As noted above, the patents actually require that the multidimensional space contains *more than* three dimensions, and the patents provide examples of other attributes for these dimensions (*e.g.*, jurisdiction (U-axis), subject (V-

axis), and depth (W-axis)) ('592 patent, 10:48–59), although the patent figures only depict three dimensions.

In the patents, the actual process of point-to-point navigation along axes is illustrated by Figure 4 (discussed at '529 patent, column 10, beginning at line 48). Just like the model above, Figure 4 below (with color enhancements) shows a three-dimensional representation of a multidimensional space, including the dimensions of time, location, and type. In Figure 4, the attribute of time appears on the x-axis, the attribute of location (statutory section) on the y-axis, and the attribute of type (legislation, cases, or journal articles) on the z-axis. Figure 4 provides a key to identify the type of document on the z-axis: "L" refers to legislation, "C" to cases, and "J" to journal articles. The even numbers 402 through 414 in Figure 4 refer to specific points on the multidimensional space in which the attributes of time, location, and type intersect.



In describing the multidimensional space, the patents emphasize the ability to move from point to point: "In the six-dimensional case, *it is possible to move along each axis and at the points of intersection change direction*" ('592 patent, 10:56–58 (emphasis added).) This navigation is not peripheral or optional, but is instead integral to the multidimensional space.

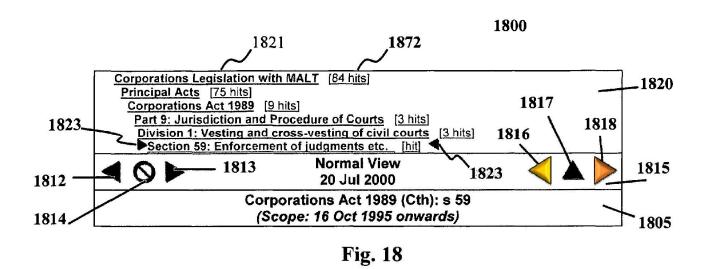
This feature of the multidimensional space is implemented through the user interface. In particular, the ability to sequentially navigate from one portion of text to

another is implemented by providing the user with "previous" and "next" buttons on the user interface, as shown below in an excerpt from Figure 13:

Time Base	Section Information	
PREVIOUS	NEXT	ALL
Subject	Jurisdiction	Related INFO

Fig. 13

Similarly, a color-enhanced excerpt from Figure 18 of the '228 patent depicts "buttons" (1816 and 1818 below) that a user can click in order to sequentially navigate along an axis.



These arrows serve the same purpose as the previous and next buttons in Figure 13: they allow sequential movement along an axis in the multidimensional space. This ability for

a user to move from point to point sequentially, using "previous" and "next" buttons, is what defines a "dimension" within the multidimensional space.

III. <u>CLAIM CONSTRUCTION</u>

A. Undisputed Claim Terms

The parties have agreed upon the following constructions:

Term	Agreed Upon Construction
Amended/Modified	Altered or changed in some way.
Means for searching/Searching means	Software for locating text-based data using attributes, links, portions, words or phrases, or the equivalent
Step of searching/Searching step	Using software to locate text-based data using attributes, links, portions, words or phrases, or the equivalent

In addition, West no longer seeks to construe "Allowing the user to search" and "allowing the user to . . . input at least one search request," so these phrases no longer require construction.

There are eleven remaining terms for which the parties seek construction:

Multidimensional Space, Linking Means, Link, Each, Attributes, Displaying, Graphical Representation, Portion, Dividing, Predefined, and Predefined Portion. The particular claims that use these terms are set forth in the Joint Claim Construction Statement submitted on May 14, 2010.

B. General Principles of Claim Construction

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quotation omitted). Claim terms are generally given their ordinary and customary meaning, which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Id. at 1313. In determining the ordinary and customary meaning, "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* In other words, because "claims are directed to the invention that is described in the specification[,] they do not have meaning removed from the context from which they arose." Netword, LLC v. Centraal Corp., 242 F.3d 1347, 1352 (Fed. Cir. 2001). This means that "the claims cannot be of broader scope than the invention that is set forth in the specification." On Demand Mach. Corp. v. Ingram Indus., 442 F.3d 1331, 1340 (Fed. Cir. 2006). Of course, in some cases, the ordinary meaning of a claim term "may be readily apparent even to lay judges," and claim construction in these cases "involves little more than the application of the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1314. The specification, however, "is always highly relevant to the claim construction analysis" because, usually, "it is the single best guide to the meaning of a disputed term." *Id.* at 1315 (quotation omitted).

Courts "should also consider the patent's prosecution history" because it may provide guidance as to how a patentee understood a particular word or phrase. *Id.* at 1317. The prosecution history, for example, can inform the meaning of the claim language "by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

Finally, evidence extrinsic to the patent and prosecution history "can also shed useful light on the relevant art," but "is less significant than the intrinsic record in determining the legally operative meaning of claim language." *Id.* (citation and quotation omitted).

C. Disputed Claim Terms

1. Multidimensional Space		
TimeBase's Proposed Construction	West's Proposed Construction	
An area not having boundaries and that is capable of, or involves, more than three dimensions [with no further definition of "dimensions"].	An area not having boundaries and that is capable of, or involves, more than three dimensions, [where the dimensions are axes along which point-to-point movement is allowed].	

The good news is that the parties agree that the definition of "multidimensional space" should include the statement in the patents' specifications that "[m]ultidimensional space refers to an area not having boundaries and that is capable of, or involves, more than three dimensions." ('592 patent, 7:52–54.) The only point of

disagreement is whether the Court should further define the last word in the agreed-upon definition: "dimensions."²

TimeBase opposes further definition of "dimensions," presumably leaving it to technical experts to debate how the term might apply to the accused products and the prior art. West, in contrast, seeks a construction *now* rather than waiting for the debate to take place on the eve of trial—or, worse, in front of the jury. *See Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1316 (Fed. Cir. 2010) (holding that the court was obligated to further explain a prior construction at trial because failing to do so would impermissibly "invite[] the jury to define this term on its own"); *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) ("When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute."). Specifically, West asks the Court to hold that "dimensions," in the context of these patents, are "axes along which point-to-point movement is allowed."

Originally, it was *TimeBase* that sought this clarification, proposing that the definition of "multidimensional space" include the phrase "allows movement along different axes or pathways." (Razavi, Ex. T, Tab B, p. 4.) In contrast, West originally proposed the definition from the specification set forth above—namely, "an area not having boundaries and that is capable of, or involves, more than three dimensions." After receiving TimeBase's construction, West agreed that "dimensions" should be clarified,

² A tutorial on the basic concepts underlying the claimed multidimensional space is provided above at pages 5–14.

and proposed using a version of TimeBase's own phrase—"and [which] allows movement along [the] different axes." Surprisingly, TimeBase refused to agree to the phrase that it originally proposed, and now argues *against* its own original definition.

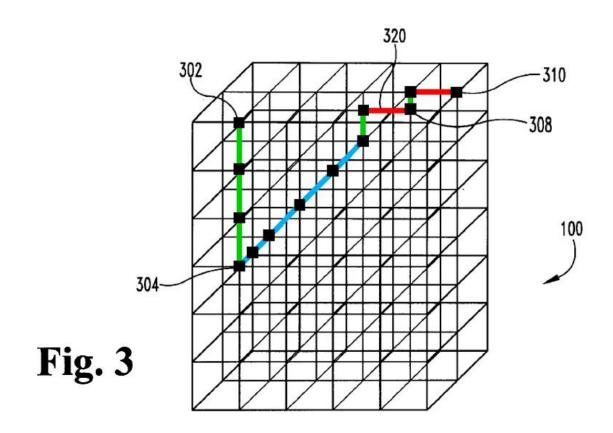
Because there is now a potential dispute regarding the meaning of "dimensions," West believes the Court should include in its construction of "multidimensional space" a further construction of "dimensions." West asks the Court to adopt its construction because it not only is consistent with the construction originally proposed by TimeBase,³ but also is the most consistent with the patents' specifications and intrinsic evidence.

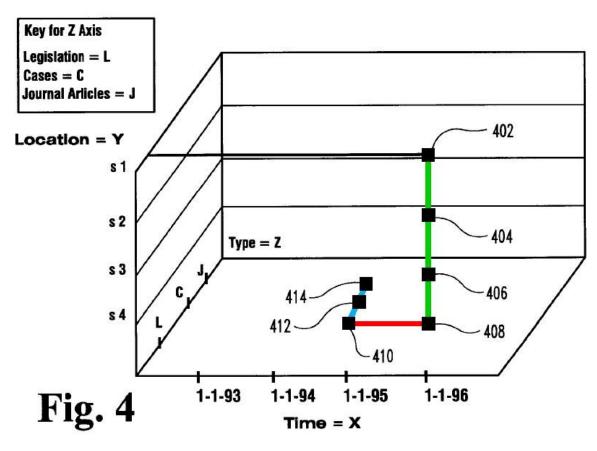
1. The Specifications Compel West's (and TimeBase's Original) Construction

The patents' specifications confirm that "dimensions" constitute "axes along which point-to-point movement is allowed" (West's proposed construction) or which "allow movement along different axes or pathways" (TimeBase's original construction, now abandoned). *See Phillips*, 415 F.3d at 1315 (holding that the specification is usually "the single best guide to the meaning of a disputed term").

As shown in Figures 3 and 4 below (with color enhancements), each portion of text is located at a point in the multidimensional space, using the portion's attributes to establish the precise location. From that location, a user can then sequentially move from portion to portion along any axis (shown as colored lines).

³ West sees no material difference in its proposed phrase "where the dimensions are axes along which point-to-point movement is allowed" and TimeBase's phrase "allows movement along different axes or pathways."





Although TimeBase now seeks to withdraw its recent statement that the multidimensional space "allows movement along different axes or pathways," TimeBase cannot withdraw similar statements its own inventors made in the specifications. The inventors regarded this ability to sequentially navigate—or move from portion to portion—as one of the keys to *every embodiment of the invention*. The inventors emphasized in the specifications that point-to-point movement constituted a "significant functional aspect *of the embodiments of the invention*." ('592 patent, 7:63 (emphasis added).) The specifications state that:

the ability to locate (assign) or map each node 102 (or key intersection point of the various axes or pathways) is a significant functional aspect of the embodiments of the invention. . . . With such coordinates 102 known (located or mapped), it is possible to move easily between points in the multidimensional space 100.

('592 patent, 7:61–67 (emphasis added).) When an inventor describes a key feature of all embodiments of an invention in the specification, courts consider this strong intrinsic evidence of the meaning of claim terms. *See, e.g., Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (limiting "fuel injection system component" to "fuel filter" because "the written description uses language that leads us to the conclusion that a fuel filter is the only 'fuel injection system component' that the claims cover, and that a fuel filter was not merely discussed as a preferred embodiment"); *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1344 (Fed. Cir. 2001) ("The words 'all embodiments of the present invention' are broad and unequivocal. It is difficult to imagine how the patents could have been clearer in making the point that the coaxial lumen configuration was a necessary element of every variant of the claimed

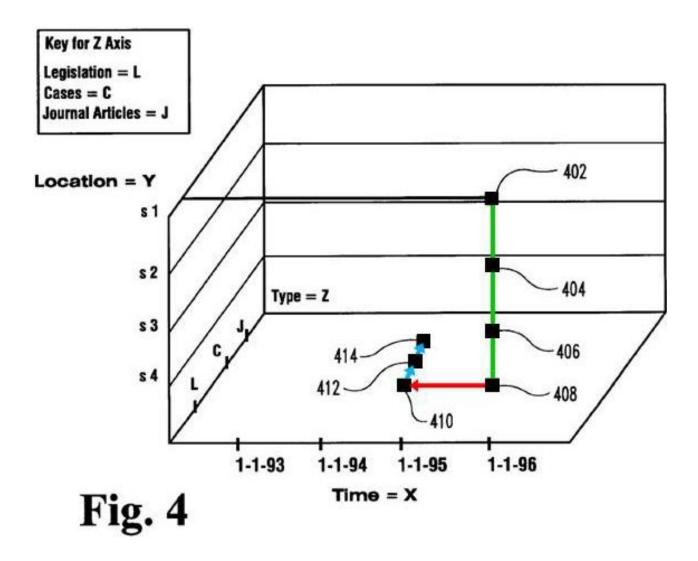
invention." (emphasis added)); *Watts v. XL Sys., Inc.*, 232 F.3d 877, 883 (Fed. Cir. 2000) ("[T]he specification actually limits the invention to structures that utilize misaligned taper angles, stating that '[t]he present invention utilizes [the varying taper angle] feature." (bracketed material in original) (emphasis added)).

In the next two sentences after the passage quoted above, the patents confirm that, to "move easily between points," one plots a course as illustrated above:

The effect of mapping nodes as shown in FIG. 3 is that a *course* 320 through the information represented in the three-dimensional space 100 *can* be easily plotted. The user begins the course 320 at node 302 and progresses vertically downward to the fourth node 304.

('592 patent, 8:1–5 (emphasis added); see also, supra, page 20, Fig. 3.)

This explanation is confirmed by other statements in the specification, which explain that a user is able to "move along each axis and at the points of intersection change direction" ('592 patent, 10:56–58 (emphasis added)) while searching through portions of text-based data by, for example, "moving [from node 408] to node 410 (along the X-axis)" ('592 patent, 11:5-6 (emphasis added)) and then "going to nodes 412 and 414 . . . along the Z-axis" ('592 patent, 11:8-10 (emphasis added)). As illustrated below with arrows, this is an explicit description of point-to-point movement:



One can only plot a course along an axis, follow along a course, and progress along a course if the multidimensional space allows point-to-point movement along the axis. Because there is no other way to move along such an axis, the Court should adopt West's construction of dimensions as "axes along which point-to-point movement is allowed" or TimeBase's original construction that a multidimensional space "allows movement along different axes or pathways." Such a construction is the one that "most naturally aligns with the patent's description of the invention" and, therefore, "will be, in

the end, the correct construction." *Nystrom v. Trex Co., Inc.*, 424 F.3d 1136, 1144 (Fed. Cir. 2005).

Other parts of the specification confirm this point-to-point movement through the user interface. Figure 13 (with color added) shows how the user sequentially moves through the points along an axis by clicking on the "previous" and "next" buttons:

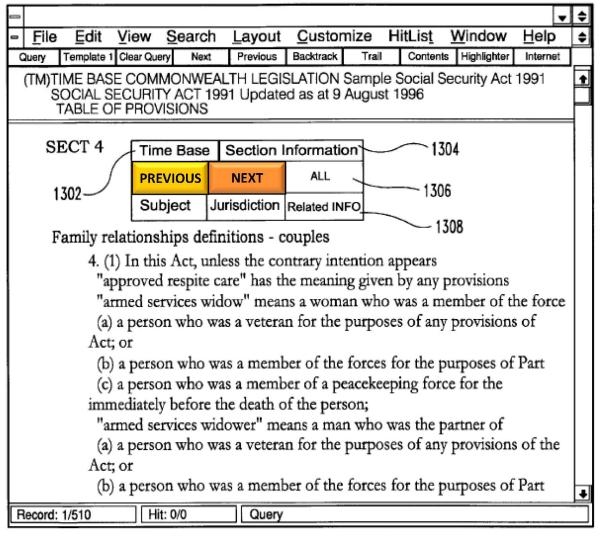


Fig. 13

The '228 patent also confirms that the point-to-point movement is achieved by "allow[ing] for one of a number of potential axes . . . to be selected and subsequently navigated" by the end user. ('228 patent, 20:4–6.) In this manner, "any number of axes may be displayed and navigated without increasing the complexity of the screen view. . . . It is this quality which allows a complex dataset to be navigated by a non-specialist end user." ('228 patent, 20:13–18.) The '228 patent further explains: "By way of example, a user may select a first node, corresponding to a provision [portion of text], in the multidimensional space. . . . If the user is interested in different versions of the provision [portion of text], the user may then *move to a second node on an orthogonal axis*, being the Versions axis." ('228 patent, 20:19–25 (emphasis added).) This is a description of point-to-point movement.

As in the other figures showing point-to-point movement, color-enhanced Figure 18 in the '228 patent shows how the user navigates along dimensions within the multidimensional space by clicking on the arrows "1816, 1818 for navigating the sequential axis" ('228 patent, 22:55–56):

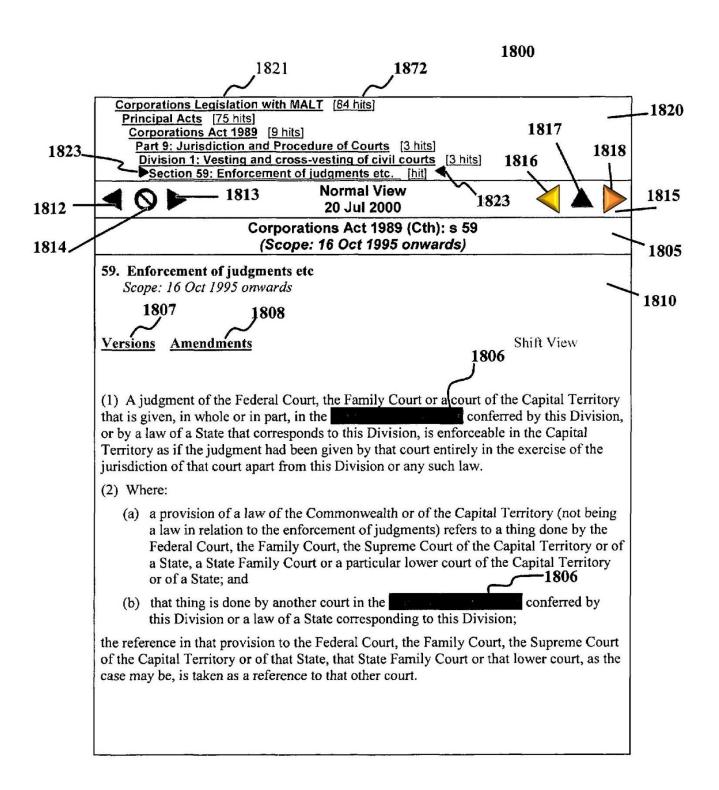


Fig. 18

In sum, there is no hint in the specifications that the term "dimensions" could include anything *other than* point-to-point movement along an axis, and TimeBase was correct in originally proposing that a multidimensional space "allows movement along different axes or pathways." Because "the claims cannot be of broader scope than the invention that is set forth in the specification," *On Demand Mach.*, 442 F.3d at 1340, and because the specification compels the conclusion that the dimensions of the multidimensional space are axes along which point-to-point movement is allowed, West's (and TimeBase's original) construction is the one that "most naturally aligns with the patent's description of the invention" and "will be, in the end, the correct construction," *Nystrom*, 424 F.3d at 1144.

2. The Prosecution History Supports West's (and TimeBase's Original) Construction

West's (and TimeBase's original) construction is also consistent with TimeBase's representations to the PTO about the scope of its invention. TimeBase explained to the PTO that "the multidimensional space may be *visualized much like the exemplary space shown in Figures 1—4.*" (Razavi, Ex. H, at 15 (emphasis added).) As already shown, these figures graphically depict point-to-point movement along axes, and TimeBase intended for the PTO to "visualize" the claimed "multidimensional space" through these figures. TimeBase emphasized the advantage of this feature of its multidimensional space to the PTO. It stated that, "because of the predefined nature of the multidimensional space, the pathways for navigating from one predefined portion to any other predefined portion are known." (Razavi, Ex. H, at 16.) TimeBase went on to say

that "[t]his approach of predefining the multi-dimensional space may be less versatile than systems designed for generic computer systems, but the system recited in claim 1 may be faster and more efficient than the document assembly approach." (Razavi, Ex. H, at 15.)

Similarly, TimeBase confirmed to the PTO that the navigation of the multidimensional space is tied to the user interface. TimeBase told the PTO that the "the multidimensional space of claim 1 may be displayed in a concrete form as an end-user interface (see, e.g., Figures 7–17)." (Razavi, Ex. H, at 16.) As explained above, it is the user interface that "allows a user to *cycle through previous and subsequent* versions of sections. . . ." ('592 patent, 13:51–52 (emphasis added).)

The patent examiner, in his statement of reasons for patentability, relied on and adopted these statements. He concluded: "'Multidimensional space' in the invention disclosed in the '592 patent is a set of organized dimension[s] By fixing one Dimension or two . . . one can trace through the other coordinates or Dimensions . . . and find the changes with respect to other variables." (Razavi, Ex. I, at 6 (emphasis added).) "Trac[ing] through the other coordinates" is synonymous with "point-to-point movement."

Because the intrinsic evidence requires the claimed multidimensional space to allow a user to move from point to point along each dimension within the space (or, as TimeBase originally proposed, "allows movement along different axes or pathways"), the Court should make this aspect of the definition explicit by appending the phrase "where

the dimensions are axes along which point-to-point movement is allowed" to the parties' agreed-upon definition.

2. Linking Means ('592 patent only)

TimeBase's Proposed Construction

A connection which utilizes any piece of code or mark-up that allows departure and destination points to be created to portions, between portions or between related material and portions.

If 35 U.S.C. §112, ¶6 applies:

<u>Linking means function</u>: The function to be performed – if §112, paragraph 6 applies – is set forth in claims 1,5,8,9,10,20,24,27,28, 29,40,47,48,49,59,60, and 61.

Generally speaking, the main function of a linking means is to connect portions to other portions and other related material, as set forth in the literal language of the applicable claims.

<u>Linking means structure</u>: A piece of information of a code or mark-up that is used to connect to, or between portions or between related material and portions.

Governed by 35 U.S.C. §112 ¶6

Function: logically connecting a block of text-based data to another specific block of text-based data.

West's Proposed Construction

Structure: markup language consisting of a single reference ID which uniquely identifies a specific block of text-based data, as described by '592 patent, at (8:45–46, 35:5,7,9) (97:24–31, 121:32–38) (9:65–10:3).

All of the '592 patent's independent claims require "linking means of a markup language," and further require that each portion of text-based data be encoded with "at least one linking means." ('592 patent, claims 1, 20, 40, 59, 60, 61.) The term "linking means" presents three claim construction issues: (1) whether "linking means" is a means-

plus-function term; and, if so, (2) whether the "linking" function only includes linking between blocks⁴ of text-based data (as West proposes), or whether the linking can be from blocks of text-based data to "other related material" (as TimeBase proposes); and, finally, (3) whether the structure for performing the "linking" function is "markup language consisting of a single reference ID which uniquely identifies a specific block of text-based data" (urged by West and disclosed in the specification), or is "a piece of information of a code or mark-up that is used to connect to, or between portions or between related material and portions" (urged by TimeBase).

1. "Linking Means" Is a Means-Plus-Function Term

First, the Court must decide whether 35 U.S.C. §112 ¶6 applies. It states:

An element in a claim . . . may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

"A claim element that contains the word 'means' and recites a function is presumed to be drafted in means-plus-function format under 35 U.S.C. §112 ¶6." *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366 (Fed. Cir. 2008). That presumption may be rebutted "if the claim itself recites sufficient structure to perform the claimed function." *Id.* "Sufficient structure exists when the claim language specifies the *exact* structure that performs the functions in question without need to resort to other portions of the specification or extrinsic evidence for an adequate understanding of the structure."

⁴ West interprets the terms "blocks of text-based data," "portions," and "portions of text-based data" as synonymous and interchangeable.

TriMed, Inc. v. Stryker Corp., 514 F.3d 1256, 1259–60 (Fed. Cir. 2008) (emphasis added). For computer-related inventions, the structure must be "more than simply a general purpose computer." Net MoneyIN, 545 F.3d at 1367. It is not sufficient that one of skill in the art might be able to build the claimed device, because that would conflate the disclosure requirement of §112 ¶6 and the enablement requirement of §112 ¶1.

Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1336–37 (Fed. Cir. 2008).

Applying these principles to the '592 patent's independent claims, the Court should adhere to the presumption that the patentee's use of the term "means" in the phrase "linking means" creates a means-plus-function limitation because of the complete lack of structure disclosed in the claims. *See TriMed*, 514 F.3d at 1259–60 (requiring that the *exact* structure be set forth).⁵

2. The Linking Function Does Not Include Linking to "Other Related Material"

When construing a means-plus-function term, a court must first determine the function that is being performed, "staying true to the claim language and the limitations expressly recited by the claims." *Omega Eng. v. Raytek Corp.*, 334 F.3d 1314, 1322 (Fed. Cir. 2003). The parties agree that the "linking" function includes logically interconnecting pieces of text-based data. The parties differ, however, about whether it *further* includes connecting portions of text-based data to "other related material."

⁵ If for some reason the Court determines that 35 U.S.C. §112 ¶6 does not apply to "linking means," then West asks the Court to adopt West's proposed construction of "link" for "linking means."

That function, proposed by TimeBase, has no support in the claims or specification. The patents describe a publishing system that stores portions of text-based data. The claims of the '592 patent repeatedly emphasize the interconnections *between* portions of text-based data, because it is only the portions of text-based data that are encoded with the linking means. The claims never refer to connections between the portions and *other* types of information. It is apparent, therefore, that the function of "linking" is logically connecting blocks of text-based data *within* the publishing system, and not logically connecting blocks of text-based data and *other* related information.

3. The Linking Structure Consists of Markup Language that Includes Only a Single Unique Identifier

After identifying the function, the Court must identify the structure corresponding to that function. *Omega*, 334 F.3d at 1322. "In order to qualify as corresponding, the structure must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function." *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113–14 (Fed. Cir. 2002). "Structures that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations." *Id.* at 1116. If there is no corresponding structure, the claim is indefinite under §112, ¶2. *Id.* at 1114.

There are three structures disclosed by the '592 patent that perform the linking function. Each of these structures (described below) works basically in the manner shown in the diagram on page 4 above:

- i) SGML ID & IDREF Links: The specifications disclose ID and IDREF fields, which use the SGML markup language to perform linking. The ID field is an SGML markup code that contains the unique identifier of a portion of text-based data, as described in the patents: "A further example [of SGML markup] is '<SECTION ID="CWACT-19950104-SEC-1" LBL="1">'." ('592 patent, 8:45–46 (emphasis added).) The IDREF is an SGML markup code (e.g., '592 patent, 35:5, 7, 9) that links one document to another (id. (describing the IDREF field as a "link.")). To perform the function of linking, the IDREF must be inserted into one document, and must contain the unique ID of the second (target) document. ('592 patent, 35:5, 7, 9.)
- ii) XREF Cross References: Table D describes cross references, or XREFs. Like IDREFs, an XREF is also an identifier that points from one document to another specific document. As the patents state, an XREF is "[a] cross reference to a single target. It has a single attribute, ref, which must contain the id string of the target of the reference."

 ('592 patent, 121:32–34; 97:24–31.) An XREF is converted to Folio Views "as a jumplink." ('592 patent, 121:38.)
- iii) Folio Views Jump Links: The third structure is a Folio Views Jump Link. These are similar to the SGML ID/IDREF fields. Indeed, the '592 patent's first embodiment states that SGML ID/IDREF links are converted into Folio Views Jump Links:

The conversion program basically maps the SGML markup to Folio Views markup. For example, for the SGML markup '<SECTION <u>ID="CWACT-19950104-SEC-1"</u>' LBL="1">', the conversion process marks all ID's substantively unchanged as Jump Destinations (JD's): '<<u>JD:="CWACT-19950104-SEC-1"></u>'."

('592 patent, 9:63–10:3 (emphasis added).) These Jump Destinations are the unique identifiers that create Jump Links from one document to another within Folio Views. (See generally '592 patent, col. 13 (indicating the use of Folio Views Jump Links).)

SGML ID & IDREF Links, XREF Cross References, and Folio Views Jump Links are the only structures that the specification associates with the linking function. Each of these three structures performs linking by placing the unique identifier of one piece of text into a second piece of text using either SGML or Folio Views' proprietary markup language. There is no other structure described for performing the linking function.

Thus, the "linking means" structure should be defined as "markup language consisting of a single reference ID which uniquely identifies a specific block of text-based data, as described by '592 patent, at (8:45–46, 35:5,7,9) (97:24–31, 121:32–38) (9:65–10:3)."

TimeBase contends that the corresponding structure is "a piece of information of a code or mark-up that is used to connect to, or between portions or between related material and portions." But that definition fails to set forth any structure whatsoever, and instead simply rewords the function. This is precisely what §112 ¶6 does not allow. In exchange for using generic means-plus-function language, a patentee is limited to the corresponding structure disclosed in the specification. An abstraction that describes how the function is performed without a description of the structure is not sufficient.

Aristocrat, 521 F.3d at 1333; Blackboard, Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1384 (Fed. Cir. 2009).

3. Link ('228 patent only)

TimeBase's Proposed Construction

West's Proposed Construction

A connection which utilizes any piece of code or mark-up that allows departure and destination points to be created to portions, between portions or between related material and portions.

A logical connection between a block of text-based data and another specific block of text-based data, where the logical connection is markup language consisting of a single reference ID, which uniquely identifies the specific block of text-based data.

The term "link" is the '228 patent's counterpart to the '592 patent's "linking means." The parties agree that a "link" requires a "connection," and further agree that these connections are between portions of text-based data using markup language. The parties disagree, however, on two issues. First, West maintains, for the same reasons discussed above in conjunction with "linking means," that links are *not* between portions of text and *other* "related materials." The '228 patent's specification never discloses links to or from other related materials, nor explains what "related materials" might be. Thus, the definition of links should not include them.

Second, West's construction incorporates the express definition set forth in the claims and the teaching of the specification; TimeBase's construction does not. The '228 claims provide significant guidance in construing "links." The claims expressly state that a link is "defined by one of the plurality of attributes." This language could not be more clear: a link is one of a plurality of attributes. Because this definition appears within the claims themselves, it must govern. *Phillips*, 415 F.3d at 1312 ("It is a bedrock principle

of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude."). Therefore, at a minimum, the Court should adopt a construction that requires a link to be markup language consisting of a single attribute.

Further construction is warranted, however, because the specification leaves no doubt that this single attribute is a unique identifier of the target portion of text (otherwise known as a "reference ID"). For example, the specification describes how to link two portions of text by adding the unique identifier of one portion to another portion: "All cross references point directly to a target by providing the id of the target as the value of an attribute of the xref element." ('228 patent, col. 111 (emphasis added).) Similarly, the specification states that a link "has a *single attribute*, ref, which *must* contain the id string of the target of the reference." ('228 patent, col. 133 (emphasis added).) In other words, both the claims and the specification repeatedly emphasize and expressly require that links consist of a single attribute, which is a unique identifier, or reference ID of a second portion of text.⁶ For these reasons, the Court should construe "link" as "a logical connection between a block of text-based data and another specific block of text-based data, where the logical connection is markup language consisting of a single reference ID, which uniquely identifies the specific block of text-based data."

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⁶ West's proposed construction is also consistent with TimeBase's prior public statements. These statements confirm that a link means a logical connection between two blocks of text-based data, where the logical connection is established by putting the reference ID of one block of text into the second block of text, using markup language. (*See, e.g.*, Razavi, Ex. J at BMG000515 ("One chunk is linked to another chunk by adding an appropriate attribute to the first chunk's record. *This attribute contains the identifier for the second chunk*." (emphasis added)); Ex. K at BMG000771 ("link – XML: *a reference ID* which uniquely identifies a specific element in a dataset" (emphasis added)).)

In contrast, TimeBase proposes a construction that lacks any support in the specification. The specification never uses the terms "departure" or "destination," never mentions "departure and destination points," and never explains what might be meant by these terms. These terms are simply not clear, and would lead to future debate regarding their meaning. Hence, the Court should reject TimeBase's unsupported construction and instead adopt West's construction, which is supported by the express language of the claims and the specification.

4. Each	
TimeBase's Proposed Construction	West's Proposed Construction
Plain and ordinary meaning, referring individually to things.	Every one considered separately.

West's proposed construction of "each" adopts the well-established meaning applied by the courts and contained in dictionaries, which make clear that "each" means every one, and not a subset of the whole. TimeBase, on the other hand, proposes an undefined "plain and ordinary meaning" and notes that the term refers "individually to things." It is not clear whether TimeBase essentially agrees with West's proposed meaning ("every one considered separately") or whether TimeBase intends to argue that the "plain and ordinary meaning" is somehow different from West's proposed meaning. To avoid ambiguity, the Court should adopt West's straightforward construction.

This Court has previously held that "[t]he ordinary meaning of the word 'each' is 'every one of two or more considered individually or one by one." Medtronic, Inc. v.

Guidant Corp., 2004 WL 1179338, at *42 (D. Minn. May 25, 2004) (emphasis added). Other courts have followed the same approach. See, e.g., Freedom Wireless, Inc. v. Alltel Corp., 2008 WL 4647270 at *12 (E. D. Tex. 2008) (holding that "each" means "every one of two or more considered individually or one by one" (emphasis added)); Mangosoft Inc. v. Oracle Corp., 2004 WL 2193614 at *5 (D.N.H. 2004), aff'd, 525 F.3d 1327 (Fed. Cir. 2008) (holding "each" to mean "a computer system . . . comprising two or more computers, every one of which of those two or more computers participating in the system has access to, and may contribute to, the shared addressable memory space" (emphasis added)); Highmark Inc. v. Allcare Health Mgmt. Sys., 2006 WL 6234624 at *11 (N.D. Tex. 2006), aff'd, 2009 WL 2038804 (Fed. Cir. July 13, 2009) (noting that "each of a predetermined plurality of persons," appears on its face to refer to every one of the predetermined plurality of persons, not just to one of them" (emphasis added)).

West's proposed definition also is consistent with standard dictionary definitions. (*E.g.*, Razavi, Ex. L at THOM00224003 ("applied to everyone of two or more people or items considered separately"; "every single one of two or more people, animals or things"); Ex. M at THOM00223996 ("every one of two or more considered individually or one by one"); Ex. N at THOM00224025 ("every one of two or more considered separately").)

Because neither the patent claims nor the patent specifications alter the wellestablished meaning of "each," the Court should adopt West's proposed construction.

5. Attributes	
TimeBase's Proposed Construction	West's Proposed Construction
A piece of code or mark-up that describes a point on an axis of a multidimensional space for example, the section number, or ID, or the effective date of a section of statute.	Characteristics or descriptors of text-based data.

West's proposed construction of "attribute" adopts the definition set forth in the patent specification, which "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." *Phillips*, 415 F.3d at 1321. In contrast, TimeBase's proposed construction describes one of the functions of an attribute in the claimed multidimensional space, but does not give meaning to the word itself.

The specifications of both patents clearly define "attributes" to mean "characteristics or descriptors" of text. The patents explain: "The embodiments advantageously . . . add to each piece of text, either expressly or implicitly, a number of attributes (characteristics or descriptors)." ('592 patent, 7:41–45 (emphasis added).) During reexamination of the '592 patent, the examiner also explicitly adopted this same definition. (Razavi, Ex. I, at 3 ("[A]dd to each piece of text, either expressly or implicitly, a number of attributes (characteristics or descriptors)."); see also Razavi, Ex. L ("a quality, characteristic, feature."); Ex. N ("a characteristic or quality of a person or thing. . . .").) Because West's construction adopts the definition of "attributes" contained in the patents, it should be adopted.

6. Graphical Representation ('228 patent only)	
TimeBase's Proposed Construction	West's Proposed Construction
A written, printed, or pictorial presentation or display.	A pictorial presentation or pictorial display.

The parties' proposed constructions of "graphical representation" are similar in that they both propose "a . . . pictorial presentation or [] display." They differ, however, in one important respect: TimeBase's proposed construction includes a "written" or "printed" display, whereas West's proposed construction makes clear that a "graphical representation" must be just that: pictorial.

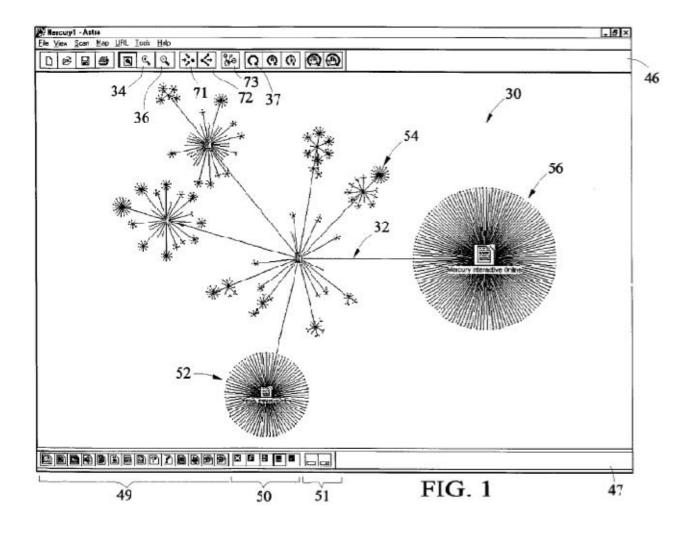
The prosecution history supports West's construction. The term "graphical representation" does not appear in either patent's specification and was not included in any claims until TimeBase added it to two independent claims of the '228 application. This occurred nearly ten years after the patent's alleged priority date and, perhaps not coincidentally, four months after West launched its Graphical Statutes product.

But what is important is what TimeBase told the PTO before it added the "graphical representation" limitation. When the PTO rejected an earlier set of claims based on prior art that provided pictorial views of dynamically-changing web sites, TimeBase tried to distinguish its invention. In direct contradiction to its current argument, TimeBase argued that its user interface, as depicted in the '228 patent figures, was *not* graphical:

Weinberg [US Patent 6,144,962] provides a graphical view of dynamically changing web site links. This is in contrast to the claimed invention, which provides a non-graphical view of a fixed pre-prepared multidimensional dataset.

(Razavi, Ex. O, at 28 (emphasis added).)⁷

The views shown in the *Weinberg* patent—which TimeBase agreed were "graphical"—are unmistakably pictorial:



⁷ TimeBase's insistence that its '228 patent figures were *not* graphical indicates that the '228 specification lacks the necessary written description of the "graphical representation," as required by 35 U.S.C. §112 ¶1.

In contrast, the figures of the '228 patent—which TimeBase insisted were *not* graphical—primarily consist of text, along with some various lines and shapes. Figure 18 is an example of the user interface that TimeBase argued was *not* graphical:

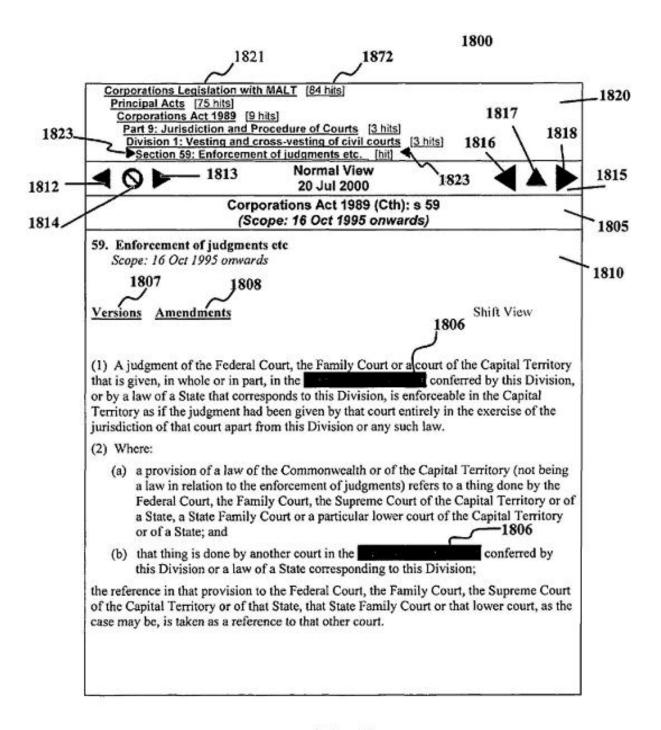


Fig. 18

The import of TimeBase's argument to the PTO is clear: user interfaces primarily depicting text, similar to its own user interface in Figure 18, are not graphical. Thus, under TimeBase's own admission, the word "graphical" does *not* include text and reveals "how the inventor understood the invention." *Phillips*, 415 F.3d at 1317. TimeBase cannot now be permitted to reverse itself.

7. Displaying (*228 patent only)		
TimeBase's Proposed Construction	West's Proposed Construction	
Putting on a visual output device of a computer; presenting data visually; providing a visual presentation of data. Output devices include printers, plotters and other reproductive devices.	Showing on a computer screen.	

Each of the independent claims in the '228 patent includes one or more steps of "displaying" information to the user. The parties agree that one way to display this information is on a computer screen, but TimeBase contends that "displaying" can also occur on "printers, plotters and other reproductive devices." By making this argument, TimeBase contends that "displaying" is akin to "printing." Because West's proposed construction is straightforward and is consistent with the claim language, the specification, and the dictionary definitions, it should be adopted.

The '228 patent's specification is clear that "display" means a video display on a computer screen. Every time the patent uses the term "display," it does so in conjunction with a video (computer) screen, never a printer. For example, Figure 5 (516) depicts the

components of a typical computer and includes a "video display" (emphasis added), but does not include a printer. At Column 16:20–21, the '228 patent states: "The computer system 500 includes a computer 502, a video display 516, and input devices 518" (emphasis added). Similarly, column 16:41–43 emphasizes that the displaying is performed on a video screen: "The video interface 510 is connected to the video display 516 and provides video signals from the computer 502 for display on the video display 516" (emphasis added). The patent never refers to "displaying" information on a "printer, plotter or other reproductive device." This is strong evidence that "displaying" means "showing on a computer screen." See Netword, 242 F.3d at 1352 ("[C]laims are directed to the invention that is described in the specification[;] they do not have meaning removed from the context from which they arose.").8

More importantly, the relevant claims make no sense if "displaying" means printing. For example, claim 13 of the '228 patent would not be possible. Claim 13 involves the "display" of legislation, and also the "display" of a link. Claim 13 also requires a user to "select" the link, causing the legislation to be "replaced with" new information. Clearly, this method must involve a computer screen, and an input device, such as a mouse or keyboard. It is not possible for a user to "select" a link on a *printout*, causing the information on the paper to be "replaced with" something else. The other independent claims that include the term "displaying" suffer similar problems under

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⁸ The patent's use of "displaying" also is consistent with common dictionary definitions. (*See, e.g.*, Razavi, Ex. P at THOM00223973 ("display": "to show text and graphics on a CRT or flat panel screen"); Ex. M at THOM00223995 ("display": "5. to show (computer data) on a CRT or other screen").)

TimeBase's proposed construction. Accordingly, when read in the context of the claims, "displaying" cannot include printing.

8. Portion	
TimeBase's Proposed Construction	West's Proposed Construction
A part of a writing or written work and more than a single word, for example, a section in the case of a statute, act or regulation.	A block of text-based data.

West seeks to define a "portion" as a "block of text-based data." This construction is supported by the claim language, the specification, and TimeBase's own statements. TimeBase seeks a narrower definition—presumably to avoid prior art—that would limit the size of a portion to more than a word and less than a whole written work. There is no basis for such a limitation.

TimeBase's proposed definition would exclude the patents' preferred embodiments, and a construction that excludes the preferred embodiment is "rarely, if ever, correct." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). For example, under TimeBase's proposed construction, cases and articles would not be portions, because cases and articles are entire written works, not *parts* of written works. The patents, however, use cases and articles as examples of portions of text-based data that might be stored in a multidimensional space: "For example, a *case* on the earlier Section 4 might be identified at node 412 and *articles* on interpretation of Section 4 at node 414." ('592 Patent at 11:10-12 (emphasis added).) Under these circumstances, it is

clear that "portion" means "a block of text-based data" and is not limited to a portion that is more than a single work and less than a whole work.

Moreover, the dependent claims ('592 claims 19, 39, 59; '228 claims 12, 21, 35, 46) already contain the very limitation that TimeBase seeks to incorporate into the independent claim. For that reason, TimeBase's proposed construction should be rejected. *See Phillips*, 415 F.3d at 1315 ("[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.").

9. Dividing ('228 patent only)	
TimeBase's Proposed Construction	West's Proposed Construction
Separating into suitable portions.	Separating into two or more parts.

The parties agree that "dividing" involves separating something into two or more things. This construction is consistent with the term's plain and ordinary meaning. (*See, e.g.*, Razavi, Ex. Q at THOM00224014 ("1 to separate into parts"); Ex. R at THOM00223978 ("Separate into ... parts or smaller groups; split up; break or cut apart"); Ex. S at THOM00224018 ("To separate into parts or groups, or to cause (something) to separate in such a way.").)

Despite the well-established meaning of "dividing," TimeBase seeks to narrow its construction to cover only "suitably" dividing. There is no basis for imputing such a limitation. "Dividing" does not have any particular meaning in the relevant field of

electronic publishing, and the specification does not assign it a narrower meaning. In fact, importing such a limitation would only render the claims in which it appears subjective and ambiguous; the patent provides no basis for a person of skill to determine when something would be a "suitable" part and when it would not. Because this is a situation in which construction "involves little more than the application of the widely accepted meaning of commonly understood words," *Phillips*, 415 F.3d at 1314, the Court should adopt West's proposed construction.

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e's Proposed Construction	West's Proposed Construction

10/11. Predefined / predefined portion ('592 patent only)

Predefined: the size or structural type of a portion determined based upon an analysis of the nature of the information and knowledge of how the information will be used.

TimeBase

Portion: a part of a writing or written work and more than a single word, for example, a section in the case of a statute, act or regulation. Predefined portion: A block of text-based data that has been chosen for storage.

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The terms "predefined" and "predefined portion" appear throughout the claims of the '592 patent. West's proposed construction of "predefined" and "predefined portion" is straightforward, whereas TimeBase again seeks to rewrite the claim to include unclaimed limitations.

The independent claims of the '592 patent start from the premise that each "predefined portion" is "stored." The independent claims recite "a plurality of predefined

portions of text-based data with each predefined portion being stored." ('592 patent, claims 1, 20, 40, 59, 60, 61.) As already explained, a "portion" is "a block of text-based data." Accordingly, since the claims require that all the portions are stored, a "predefined portion," in the context of the claims, is "a block of text-based data that has been chosen for storage." That is all it is.

TimeBase's proposed construction, on the other hand, seeks (like "dividing" above) to create ambiguity and confusion. TimeBase's construction would add a *method* step—"an analysis of the nature of the information and knowledge of how the information will be used"—to each claim in the '592 patent, including *apparatus* claims. This is improper. *See IPXL Holdings, LLC v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005). Furthermore, it would import a subjective mental analysis into the claim, which fails to adequately define the scope of the claims. *Phillips*, 415 F.3d at 1312. Indeed, it would render the claims incomprehensible. Under these circumstances, the Court should reject TimeBase's proposed construction and adopt West's straightforward construction.

IV. <u>CONCLUSION</u>

For the foregoing reasons, defendants respectfully ask that the Court adopt their proposed constructions of the disputed claim terms.

Dated: June 11, 2010 FAEGRE & BENSON LLP

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